

61. An isolated polypeptide comprising a member selected from the group consisting of

(a) an amino acid sequence matching SEQ ID NO:2 or SEQ ID NO:4;  
(b) an immunogenic polypeptide comprising a fragment sequence of at least 15 amino acids that matches an aligned contiguous segment of SEQ ID NO:2 or SEQ ID NO:4;

wherein the isolated polypeptide, when administered to a subject in a suitable composition which can include an adjuvant, or a suitable carrier coupled to the polypeptide, induces an antibody or T-cell immune response to a polypeptide having the sequence of SEQ ID NO:2 or SEQ ID NO:4;

62. The isolated polypeptide of claim 61, wherein the polypeptide is according to (a).

63. The isolated polypeptide of claim 61, wherein the polypeptide is according to (b).

64. The isolated polypeptide of claim 61, wherein the immunogenic fragment of (b) comprises at least 20 amino acids.

65. The isolated polypeptide of claim 61, wherein the isolated polypeptide consists of SEQ ID NO:2 or SEQ ID NO:4.

66. A fusion protein comprising the isolated polypeptide of Claim 61.

67. An immunogenic composition comprising the polypeptide of Claim 61 and a pharmaceutically acceptable carrier.

68. The immunogenic composition of Claim 67, wherein the vaccine comprises at least one other *Moraxella catarrhalis* antigen.